



Competency 1.15 Industrial hygiene personnel shall demonstrate a working level knowledge of Industrial Hygiene programs.

1. Supporting Knowledge and Skills

- a. Describe the major components of sound industrial hygiene programs.
- b. Discuss management of industrial hygiene resources.
- c. Discuss the impact of legal requirements.
- d. Discuss the implications of noncompliance.
- e. Discuss target populations.
- f. Discuss different assessment techniques.

2. Recommended Reading

Review

- DOE Order 440.1, *Worker Protection Management for DOE Federal and Contractor Employees*.
- DOE Order 5480.10, *Contractor Industrial Hygiene Program*.
- *Fundamentals of Industrial Hygiene*, Chapter 28, "The Industrial Hygiene Program," 3rd Edition, National Safety Council.

3. Summary

The purposes of the industrial hygiene program are the prevention of occupational illness and the achievement of compliance with regulations and other applicable guidance.

A sound industrial hygiene program requires workplace surveillance. There is no minimum amount of surveillance required; rather, the frequency of surveillance should be according to some plan or schedule that is based upon the level of hazard present in the different work areas.



The surveillance should serve as the basis for personal monitoring of operations when it is believed that there is the potential for significant exposure, i.e., at about the action level where medical surveillance or protective action should be considered. Sampling should be performed with appropriate equipment and using defensible methods. Any laboratory analysis should be performed by an organization accredited to perform this analysis. Sampling and analysis should be performed in accordance with SOPs to ensure the consistency and defensibility of data generated.

When surveillance identifies hazards that must be controlled, recommendations should be provided in a useful format to the action line or staff organization. Assistance should be provided to these organizations in achieving the desired results, and the completion of required action should be monitored.

Retention of important documentation is critical. Any documentation relating to past technical decision making should be retained, and documentation that may be useful in present or future decision making should be easily retrievable.

Because field surveillance after the fact may be too late, special provisions should also be made for industrial hygiene to become involved at some point in building design and operational planning, and hazardous materials inventory management. Industrial hygiene should also work closely with occupational medicine.

Typically, industrial hygienists have served as staff consultants who provided services to sometimes unwilling line organizations. The practice of serving as consultants, unfortunately, left the industrial hygienists as outsiders with relatively little influence, where they could be safely ignored except for periods following adverse inspections or audits. The more effective industrial hygiene program will attempt to thoroughly integrate industrial hygiene into all line activities so that the industrial hygienists are seen as members of the line organization, serving its goals and interests.

DOE is convinced that management commitment and employee involvement are essential to a successful industrial hygiene program. Management commitment should be demonstrated by action. Employee involvement in identification and control of the hazards of their job may result in dramatic improvement in worker protection.

Key DOE-wide initiatives, such as Integrated Safety Management, Voluntary Protection Program, and Enhanced Work Planning, aggressively promote these principles of hazard identification, integration of functions, management commitment, and employee involvement.



4. Suggested Exercises

Please refer to Scenario 6 in the Scenario section of this document.